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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/960,498 | 09/24/2001 | Masakazu Tanaka | 12-008 | 7238 |

23400 7590 10-06/2004

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| EXAMINER |
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WRIGHT, WILLIAM G

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| ART UNIT | PAPER NUMBER |
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1754

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,498

Applicant(s)

TANAKA ET AL.

Examiner

William G. Wright SR.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8-3-2004
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-16,19-32 and 42-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-16,19-32 and 42-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-08-2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Applicant's arguments against all of the outstanding rejections have been found persuasive. Accordingly all of the previous rejections of record are withdrawn.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-7, 9-16, 19-32 and 42-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japan 62-004441 in view of Deeba et al. '848 or Uchikawas et al. '221.

Japan '441 teaches the production of cordierite ceramic honeycomb support for auto exhaust catalyst with the catalyst directly placed on the said ceramic support. These disclosures are taught at page 3 line 3 et seq. of the English translation. The teaching of the partial eluting of magnesium oxide and aluminum oxide components from the cordierite is found at page 4 line 18 et seq. of the English translation. The magnesium oxide and the aluminum oxide are considered constituent elements that are eluted to provide sites for catalyst elements to attach directly to the

ceramic support. The teaching of catalyst elements such as platinum, palladium, rhodium, manganese, iron or copper is found at page 9 line 9 et seq. of the English translation. The teaching of sublimation of the precious catalytic metal platinum is taught at page 9 line 25.

Japan '441 does not directly teach the feature of a trapping component and the feature of a defect in the ceramic support.

The supporting reference to Deeba teaches the use of a catalyst trap in claim 1 et seq.; the teaching of Group VIII metals is found in claim 5. Ceramic supports are taught at column 14 line 39 and at Figure 2 of column 7.

The supporting reference to Uchikawas teaches the feature of a protecting layer at claims 9 and 16. Claim 9 also teaches the presence of noble metal catalysts. The presence of a lattice effect is taught at column 1 line 61. The specific teaching of catalytic effects of the Uchikawas invention are taught at column 6 line 15 et seq.

All of the references teach the utility of auto gas exhaust treatment with noble metal catalysts on a ceramic support. The primary reference teaches that it is known to place the catalytic elements directly on the ceramic support by way of the removing of constituent elements so as to provide a better site for the catalytic elements to attach to. The supporting references teach the feature of lattice defects, a protecting layer, traps and the same type of catalyst components on the same type of supports. The instant claimed invention is obvious from the teachings found in the reference combination. The motivation to make a more efficient exhaust gas catalyst would drive a practitioner to use the teachings of the supporting references to accomplish that end with the catalyst of the primary reference.

Claims 1-7, 9-16, 19-32 and 42-49 are provisionally rejected under 35 U.S.C. § 103(a) as being obvious over copending Application No. 09/546,227 which has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending

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application, it would constitute prior art under 35 U.S.C. § 102(e) if patented. This provisional rejection under 35 U.S.C. § 103(a) is based upon a presumption of future patenting of the conflicting application.

The file 09/546,227 teaches a ceramic support which has an oxygen vacancy, lattice defects and cracks in which the catalytic elements are directly supported. Cordierite is taught as the ceramic. The teaching of replacing elements is found in claim 27 as being silicon, aluminum and magnesium. Claims 1-103 show the claimed features named above. The utility is auto gas catalyst taught at page 1 line 9 et seq.

The missing feature not found in Serial No. 09/546,227 is the exact details of some of the instant claims as to the amounts of elements and sizes of the features found in the physical description of the catalyst per se.

These missing features would be obvious expedients left to a practitioner constructing a catalyst for the claimed utility. There is motivation to improve on catalyst performance and durability by using the disclosed supports to accomplish this end. The instant claimed invention is obvious from the teachings of the copending file 09/546,227.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7, 9-16, 19-32 and 42-49 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-103 of copending application Serial No. 09/546,227. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope of subject matter claimed.

This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (571) 272-1361. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (571) 272-1558. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WGW SR.

W. G. Wright, Sr.:cdc

September 14, 2004

STEVEN BOS
PRIMARY EXAMINER
GROUP 1100

A handwritten signature in black ink, appearing to read 'S. Bos', is written below the printed name and title.